Chief, St/I/R   11 January 1955

THRU   :   Chief, D/S

Chief, S/TR

25X1A2g

Proposed Project for ████ Organization.

25X1A6a   25X1A2g   25X1A6a

25X1A6a   The AD/RR recently indicated that the ████ organization in ████
████ is in a position to undertake a study of an East German trans-
portation problem. It is understood that such a study would represent
extensive research and culminate in a finished intelligence report.   25X1A2g
S/TR proposes that ████ be given the project outlined in the attached
supplement.

The proposed project, "Capacity of Strategic East-West Transport
Facilities in East Germany," would fill an important intelligence gap.
An interagency intelligence working group is presently engaged in an
extensive investigation of the capacity of strategic east-west trans-
port facilities in the European Satellite region for Joint Chiefs of
Staff, Weapons System Evaluation Group (WSEG). In this high priority
study, the capacity of selected East German transport facilities is a
particularly vital element. Timely completion of the proposed project
should greatly assist those responsible for the WSEG undertaking. It
is recommended that the report be submitted to ORR section by section as
25X1A2g   ████ progresses through the study.

25X1A9a

████████

Enclosure:
"Capacity of Strategic East-West Transport Facilities in East Germany"

CAPACITY OF STRATEGIC EAST-WEST TRANSPORT FACILITIES IN EAST GERMANY

I.   Summary

II. Rail Transport

    A.   Strategic East-West Rail Lines (select lines which join the strategic
       east-west lines of Poland at East German-Polish border point)

        1.   Criteria for selection of lines.

        2.   Lines on which developments since 1946 have been concentrated
           (construction, reconstruction and improvement as a clue to
           strategic planning).

        3.   List of strategic east-west lines.

    B.   Physical Characteristics of Lines and Fixed Facilities

        1.   Line No. 1

           a.   Track (number of tracks, distance between sidings, weight of
               rail)

           b.   Grades and curves (ruling grades, minimum radius of curvature)

           c.   Communication and signal equipment

           d.   Condition of fixed facilities

           e.   Bottleneck sections

        2, etc. Other lines, respectively, treated as in 1. above

    C.   Capability of Strategic Rail Lines

        1.   Line No. 1

           a.   Computed capacity of line. Specify capacity in terms of
              the following:

               1)   total trains each way per day
               2)   number of freight trains each way per day (derived by
                 reducing total in (1) by allowances for minimum essential
                 passenger trains, trains carrying railroad supplies, and
                 line interruptions caused by work trains, floods, wrecks, etc.
               3)   gross and net tons per freight train
               4)   freight train capacity measured in net tons each way per
                 day (i.e. (2) x (3).)

       (In making estimate, consider adequacy of various line facilities
       such as yards, repair facilities for cars and locomotives, coaling
       and watering stations, average speed of trains between passing
       tracks, time spent at terminals, and other factors. Assume that there
       is no interruption in traffic due to bombing of lines. Compute capacity

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on basis of two alternative assumptions: (1) peacetime conditions and (2) a military thrust westward across East Germany. Under the latter assumption compute capacity for two alternative time periods during which maximum daily tonnage can be delivered to western terminals of the lines namely, (1) a short period of one month and (2) a long period of one year. Specify in detail assumptions and methodology.)

b. Maximum traffic realized on line

(actual traffic count, maximum traffic for specified periods, average number of trains, average number of cars per train, average load per car)

c. Possibilities for increasing capacity

(most feasible means of readily augmenting line capacity)

2, etc. Other lines, respectively, treated as in 1. above.

D. Locomotives and Rolling Stock of East Germany

1. Locomotives

a. Inventory (Breakdown by type and tractive effort)

b. Condition (Include percentage out of operation at any one time for repair)

2. Rolling Stock

a. Inventory (Breakdown by type, number of axles and unit capacity)

b. Condition (Include percentage out of operation at any one time for repair)

E. Capability of Locomotives and Rolling Stock

(Compute capacity on basis of two alternative assumptions: (1) peace-time conditions, in which case total capability for entire locomotive and rolling stock park would be computed and (2) a military thrust westward across East Germany in which case capability would be computed for that portion of the total park which would be required to operate the strategic east-west lines at capacity. Assume a military thrust westward for two alternative time periods during which the maximum daily tonnage can be delivered at western termini of the strategic lines: (a) a short period, such as one month, and (b) One year. Assume that sufficient locomotives and cars are allocated to military movement to fully utilize strategic line capacity. Assume also that there is no interruption in traffic due to bombing of line. Specify in detail assumptions and methodology).

1. Computed capacity for locomotives

(Specify capacity in terms of the following:

a) average net and gross tonnage per train

b) average distance moved per operable locomotive per day or per year

c) average net and gross ton kilometers per operable locomotive day or year, i.e., a times b)

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2. Computed capacity for rolling stock

(Specify capacity in terms of the following:

a) average net tons per car

b) average distance moved per operable freight car per day or year, i.e., freight car kilometers per operable day or year

c) Ratio of loaded freight car kilometers to total freight car kilometers

d) average net ton kilometers per operable freight car day or year, i.e. a times b times c).

III. Highway Transport (adapt above outline)

IV. Inland Water and Maritime Transport (adapt above outline)

V. Transport Flexibility

A. Possible shifts in use of alternate means of transport

(Degree of flexibility in shifting traffic from one means of transport to another, e.g., from rail to inland water)

B. Readjustment during war time

(Location and capability of alternate routes available in case portions of strategic lines are interrupted by bomb damage)

VI. Effect of Minimum Levels of Civilian Traffic on Capability of Routes for Through Military Movements

A. Estimated minimum levels of civilian traffic on each major east-west route

(Assume a military movement of one year duration. Include breakdown of tonnages by major commodities. Indicate methodology used in obtaining estimate)

B. Residual Capacity of routes for through military movements

(Estimate for each route and each segment of these routes by subtracting the (1) estimated minimum level of civilian traffic, i.e., VI. A. from (2) freight train capability, i.e., estimate derived in I.C. 1. a.4)

C. Adequacy of locomotive and rolling stock inventory

(adequacy to satisfy requirements for transporting, over the strategic lines, the minimum level of civilian traffic, i.e., VI A, and the maximum amount of military traffic, i.e., VI B.)

NOTE: Give the source of all data which is not generally known. Cite sources by the use of footnotes and include in the citation the originator of the document, date of publication or distribution, date of information, security classification and evaluation of the data.

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